

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claims 1-4 (Cancelled)

5. (Currently Amended) A spiral inductor comprising:
n levels ($n \geq 2$) of electrically conductive films;
insulators inserted between pairs of the levels of the electrically conductive films;
a continuous spiral interconnect having a spiral shape and including continuous spiral turns, an internal end located inside the spiral shape, and an external end located outside the spiral shape, the spiral interconnect being disposed entirely in an i-th layer ($2 \leq i \leq n$) of the electrically conductive films, and being electrically connected by contact plugs to an electrically conductive film in a layer adjacent to the i-th layer; and
a first underpass interconnect, including a k-th layer ($1 \leq k \leq n-1$) of the electrically conductive films, that is electrically connected to an electrically conductive film in a layer adjacent to the k-th layer, and that is electrically connected through contact plugs to the internal end of the spiral interconnect, where the spiral interconnect and the first underpass interconnect are opposite each other, wherein,
j ($1 \leq j < i$) layers of the electrically conductive films are part of the first underpass interconnect, and
at least one of the turns of the spiral interconnect where opposite the first underpass interconnect is wider than parts of the turns of the spiral interconnect that are not directly opposite the first underpass interconnect; and
a second underpass interconnect including h levels ($1 \leq h \leq n-1$) of electrically conductive films electrically connected by contact plugs to an electrically conductive film in an adjacent layer, and electrically connected to the spiral interconnect between the internal and external ends, but not to the internal and external ends of the spiral interconnect, where the spiral interconnect and the second underpass interconnect are opposite each other,
wherein
m layers ($1 \leq m < i$) of the electrically conductive films adjacent to each other are part of the second underpass interconnect, and
at least one of the turns of the spiral interconnect where opposite the second underpass interconnect is wider than parts of the turns of the spiral interconnect that are not directly opposite the first and second underpass interconnects.

Claim 6 (Cancelled).

7. (Previously Presented) A transformer that is a combination of the two spiral inductors, each of which is described in Claim 5.

Claim 8 (Cancelled).